

L Number	Hits	Search Text	DB	Time stamp
1	589	((138/115) or (138/116)).CCLS.	USPAT; US-PGPUB	2004/04/28 18:05
2	1782	((138/137) or (138/141) or (138/dig.3)).CCLS.	USPAT; US-PGPUB	2004/04/28 18:05
3	1104	(138/109).CCLS.	USPAT; US-PGPUB	2004/04/28 18:05
4	1056	(428/36.91).CCLS.	USPAT; US-PGPUB	2004/04/28 18:05
5	4220	(((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)	USPAT; US-PGPUB	2004/04/28 18:06
6	491386	polyamide or pa or nylon	USPAT; US-PGPUB	2004/04/28 18:06
7	738991	coupling or couplings or connectors	USPAT; US-PGPUB	2004/04/28 18:08
8	26844	fluorocarbon	USPAT; US-PGPUB	2004/04/28 18:09
9	127732	ptfe or teflon or polytetrafluoroethylene	USPAT; US-PGPUB	2004/04/28 18:09
10	7375	fep	USPAT; US-PGPUB	2004/04/28 18:09
11	328	pfe	USPAT; US-PGPUB	2004/04/28 18:09
12	129649	(ptfe or teflon or polytetrafluoroethylene) or fep or pfe	USPAT; US-PGPUB	2004/04/28 18:09
13	302834	foamed or expanded	USPAT; US-PGPUB	2004/04/28 18:09
14	68337	carbon adj black	USPAT; US-PGPUB	2004/04/28 18:10
15	1101	(polyamide or pa or nylon) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) and (foamed or expanded) and (carbon adj black)	USPAT; US-PGPUB	2004/04/28 18:10
16	394	((polyamide or pa or nylon) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) and (foamed or expanded) and (carbon adj black)) and (coupling or couplings or connectors)	USPAT; US-PGPUB	2004/04/28 18:10
17	1053220	pipe or hose or conduit or tube	USPAT; US-PGPUB	2004/04/28 18:10
18	223	(((polyamide or pa or nylon) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) and (foamed or expanded) and (carbon adj black)) and (coupling or couplings or connectors)) and (pipe or hose or conduit or tube)	USPAT; US-PGPUB	2004/04/28 18:13
19	26679	(polyamide or pa or nylon) same outer	USPAT; US-PGPUB	2004/04/28 18:14
20	14954	((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner	USPAT; US-PGPUB	2004/04/28 18:14
21	1	("5611373").PN.	USPAT; US-PGPUB	2004/04/28 18:16
22	43	("0664950"   "2280140"   "2551710"   "2838074"   "3037529"   "3269422"   "3604461"   "3720235"   "3847208"   "3853149"   "3880194"   "3901281"   "4194767"   "4196464"   "4216802"   "4343844"   "4380253"   "4462620"   "4496823"   "4510974"   "4559973"   "4708842"   "4733800"   "4754782"   "4758455"   "4786086"   "4787921"   "4851821"   "4886305"   "4906496"   "4930544"   "5005613"   "5038833"   "5040830"   "5056492"   "5076329"   "5120084"   "5143410"   "5167259"   "5219003"   "5284184"   "5343738"   "5433252").PN.	USPAT	2004/04/28 18:14
23	161	(((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)	USPAT; US-PGPUB	2004/04/28 18:16

27	66	((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer))) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (foamed or expanded)))	USPAT; US-PGPUB	2004/04/28 18:17
28	19	((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (foamed or expanded)))	USPAT; US-PGPUB	2004/04/28 18:17
29	12	((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (foamed or expanded))))	USPAT; US-PGPUB	2004/04/28 18:19
30	7	((((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (foamed or expanded)))) not (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))) and (foamed or expanded))))	USPAT; US-PGPUB	2004/04/28 18:20

31	47	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer))) not (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer))) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)))	USPAT; US-PGPUB	2004/04/28 18:22
32	95	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) not (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)) and (((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)))	USPAT; US-PGPUB	2004/04/28 18:23
24	500	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)	USPAT; US-PGPUB	2004/04/28 18:25
25	552	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)	USPAT; US-PGPUB	2004/04/28 18:30
33	5	("4096887"   "4132576"   "4654962"   "5305797"   "5360291").PN.	USPAT	2004/04/28 18:32
34	16	("2151206"   "3383456"   "4064355"   "4368348"   "4440195"   "4524808"   "4804020"   "5010440"   "5172730"   "5305798"   "5395472"   "5743299"   "5762450"   "5928447"   "5971029"   "6058978").PN.	USPAT	2004/04/28 18:32
26	388	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)	USPAT; US-PGPUB	2004/04/28 18:41
35	1200	((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or (((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner))	USPAT; US-PGPUB	2004/04/28 18:42

36	537	(((138/115) or (138/116)).CCLS.) not ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner))))	USPAT; US-PGPUB	2004/04/28 18:50
37	14	"0417992"   "2161666"   "3110754"   "3889715"   "3941157"   "4273065"   "4343844"   "4474426"   "4496823"   "4729409"   "5765598"   "5924456"   "6032699"   "6102077".PN.	USPAT	2004/04/28 18:43
38	1737	(((138/115) or (138/116)).CCLS.) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner))))	USPAT; US-PGPUB	2004/04/28 18:51
39	2483	(((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner))))	USPAT; US-PGPUB	2004/04/28 18:51
40	228	(((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or ((((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)))) and multi	USPAT; US-PGPUB	2004/04/28 18:54

41	3395	<p> ((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not (((138/115) or (138/116)).CCLS.) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)))) noto (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not (((138/115) or (138/116)).CCLS.) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)))) and multi) </p>	USPAT; US-PGPUB	2004/04/28 18:54
42	2255	<p> ((((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not (((138/115) or (138/116)).CCLS.) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)))) not (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) not (((138/115) or (138/116)).CCLS.) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and ((polyamide or pa or nylon) same outer)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (foamed or expanded)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (carbon adj black)) or (((138/115) or (138/116)).CCLS.) or (((138/137) or (138/141) or (138/dig.3)).CCLS.) or ((138/109).CCLS.) or ((428/36.91).CCLS.)) and (((ptfe or teflon or polytetrafluoroethylene) or fep or pfe) same inner)))) and multi) </p>	USPAT; US-PGPUB	2004/04/28 18:54



## Inventor Name Search

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